

ABSTRACT OF THE DISCLOSURE

A wavelength division multiplex transmission system with substantial functions for avoidance of defects is provided. The system comprises an optical transmission device and an 5 optical receiving device. The optical transmission device comprises an operating-system optical transmission unit and a standby-system optical transmission unit, and distributes transmission signals to be transmitted among a plurality of wavelength components, converts the signals into WDM signals, 10 and transmits the WDM signals to a WDM transmission network. The optical receiving device comprises an operating-system optical receiving unit and a standby-system optical receiving unit, and restores WDM signals from the WDM transmission network into transmission signals. The operating-system 15 optical transmission unit and/or the standby-system optical transmission unit has optical transmission unit internal defect avoidance means which, upon the occurrence of a prescribed number or fewer of wavelength component 20 transmission defects, avoids defects within the optical transmission unit.